

J. E. HARRINGTON.
Vehicle-Hubs.

No. 149,394.

Patented April 7, 1874.

Fig. 1.

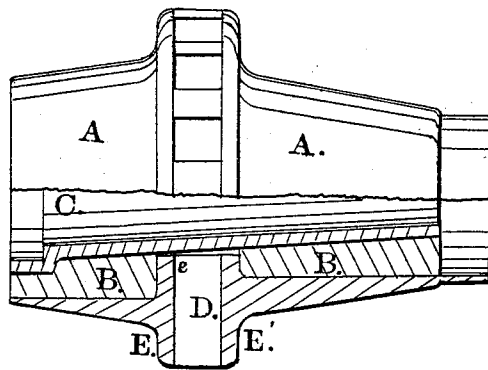
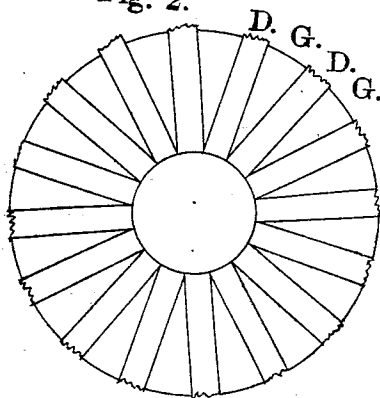


Fig. 2.



Witnesses
S. Gains
Paul Lane }

Inventor;
John E. Harrington
Per J. G. Arnold.
Atty.

UNITED STATES PATENT OFFICE.

JOHN E. HARRINGTON, OF MILLBURY, MASSACHUSETTS, ASSIGNOR OF ONE-HALF HIS RIGHT TO CHAUNCEY MORSE, OF SAME PLACE.

IMPROVEMENT IN VEHICLE-HUBS.

Specification forming part of Letters Patent No. **149,394**, dated April 7, 1874; application filed December 31, 1873.

To all whom it may concern:

Be it known that I, JOHN E. HARRINGTON, of Millbury, in the county of Worcester, State of Massachusetts, have invented an Improved Hub for Carriage-Wheels, of which the following is a specification:

My invention relates to the construction of a hub, in which the common iron box may be used and set after the wheel is made, and is designed to facilitate the setting and enable them to be reset or the wheel trued as often as desired, besides forming a firm, solid body or single piece, in which the spokes are securely held.

Its nature consists in forming a metal shell or outside of the hub of one piece, in such form as to provide sockets for the spokes which hold the sides of said spokes, and support them from the outer part of the hub down to, or nearly to, the box inserted—that is, supports them against side strain of the wheel—the other sides of the sockets or mortises being formed by wedge-shaped webs connecting the others between each spoke, in such form that the inner ends of the spokes come together and fill the whole space, wedging one another, and forming a continuous body of wood round the box, and giving an opportunity to glue the inner ends of the spokes to each other, if desired, the ends of the shell on each side of this middle portion or spoke-socket being made so as to admit a wood body or plug between the box and the shell, so as to admit wedges to be used to fit or true the box in the hub and wheel.

In the accompanying drawings, Figure 1 is a side view of a hub embodying my invention, the lower half being shown in section, showing the wood filling used in each end. Fig. 2 is a plan of the socket and spokes, or a cross-section through the center of the hub, with the butts of the spokes in place.

A is the shell; B B', the wood ends; C, the box; D, the spoke; E E', the socket-plates;

G G G, the connecting-webs. The plates E E' extend down or in nearly to the box C, as shown at *e*, and form the sockets or mortises for the spokes, giving them firm support to their ends. The webs G G between each spoke extend in sufficiently to form a mortise for each spoke, similar to those in common wooden hubs, and these are so calculated that the ends of the spokes shall fill the circle when driven in close, or nearly so, to the box. The end fillings B B' are made of well-seasoned wood, and driven into the casting or shell from each end. The shell A entirely covering the wood enables me to wedge freely, if needed, when setting the box after the wheel is made and tire set; and if the resetting of the tire should spring the wheel, as sometimes happens, it can be trued, as at first, and the box can be retightened if from any cause it should become loose.

I am aware that hubs have been made with a shell with wood ends inserted, and sockets formed by webs and flanges for wedge-shaped separate spokes. These I do not claim, as they do not have the same quality as mine, which is an improvement on them in providing for the inner ends of the spokes to be larger and come together, to be glued, if desired, and make part of the wood core in which the box is set.

. I claim—

A vehicle-hub consisting of the shell A, having sockets for the spokes D, formed by the webs G G and flanges E E', in such manner that the inner ends of the spokes come together and wedge each other, the wood fillings B B', inserted in each end of the shell, forming a wood core, in which the box for the axle is set, all combined as set forth.

JOHN E. HARRINGTON.

Witnesses:

SANTIAGE GREENE,
J. G. ARNOLD.